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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR. | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/649,340 | 08/27/2003 | Herbert Kaminski | B0004/7113 | 4165 |

64967 7590 12/28/2006
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| EXAMINER |
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CARTER, AARON W

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| ART UNIT | PAPER NUMBER |
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2624

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 12/28/2006 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/649,340

Applicant(s)

KAMINSKI ET AL.

Examiner

Aaron W. Carter

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the pattern generation" in line 8 and 10. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "pattern recognition programs" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "the result list" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "pattern recognition programs" in lines 2 and 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 5,412,578 to Takagi et al. ("Takagi").

As to claim 1, Takagi discloses a method for the investigation of patterns in collections of peak-containing data strings or lists of peaks, the method comprising the following steps:

(a) displaying the data of the collections of data strings or peak lists in graphical form (Fig. 10 and 11 and column 12, lines 58-63, wherein the histogram corresponds to data of the collections of data strings or peak lists) ;

(b) calculating significant patterns, correlations or classifications within one or between different collections of data strings or peak lists by pattern recognition algorithms, thereby including a determination of the peaks significantly participating in the pattern generation ((Fig. 10 and 11 and column 12, lines 23-27, wherein crests correspond to peaks); and

(c) highlighting, in the graphical display of the data strings or peak lists, the peaks significantly participating in the pattern generation (Fig. 10 and 11 and column 12, lines 58-63, wherein differentiating by different kinds of lines corresponds to highlighting).

As to claim 2, Takagi discloses a method according to claim 1, wherein the data strings are displayed, in step (a), by density plot (Fig. 10 and 11 and column 12, lines 58-63, wherein the histogram displayed corresponds to a density plot)

As to claim 3, Takagi discloses a method according to claim 1, wherein features of the graphical display are interactively accessible (Fig. 9a, 9b and 10 and column 12, lines 56-58, wherein crest selection can be down manually which corresponds to interactively).

As to claim 5, Takagi discloses a method according to claim 3, wherein peaks to be compulsory included in the results list of significant peaks by pattern recognition programs can be selected on the display before the pattern recognition programs are started (Fig. 9a, 9b and 10 and column 12, lines 56-58, wherein crest selection can be down manually which corresponds to the selection peaks to be included in the results list).

As to claim 7, Takagi discloses a method according to claim 1, wherein the intensity values of the data strings are transformed by a filter before the pattern recognition algorithm is applied (Fig. 6a, 6b and 7 and column 11, lines 32-68, wherein shading correction of the histogram corresponds to filtering the intensity values of the data strings).

Allowable Subject Matter

4. Claims 4 and 6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

USPN 3,705,383 to Frayer discloses the use of a histogram in pattern recognition.

USPN 4,323,880 to Lucas discloses the use of a histogram in pattern recognition.

USPN 4,823,194 to Mishima et al. discloses the use of a histogram in pattern recognition.

USPN 4,961,231 to Nakayama et al. discloses the use of a histogram in pattern recognition.

USPN 5,073,954 to Van Tyne et al. discloses the use of a histogram in pattern recognition.

USPN 5,410,613 to Suzuki discloses the use of a histogram in pattern recognition.

USPN 5,703,964 to Menon et al. discloses the use of a histogram in pattern recognition.

USPN 5,926,564 to Kimura discloses the use of a histogram in pattern recognition.


USPN 6,901,165 to Egger et al. discloses the use of a histogram in pattern recognition.

“Bar Code Waveform Recognition Using Peak Locations” to Joseph et al. discloses the use of a histogram in pattern recognition.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron W. Carter whose telephone number is (571) 272-7445. The examiner can normally be reached on 8am - 4:30 am (Mon. - Fri.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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